ART IN ARCHITECTURE

Designed and Written Especially for This Paper.

HERE is a home which is pleasing and attractive in appearance and somewhat unique in arrangement of the kitchen, pantry and dining-room. When one builds a house, it is quite natural that his or her individual tastes and ideas should become manifest both in the arrangement of rooms and the exterior appearance, and the opportunities for the display of good taste in such matters are almost unlimited. This house is large, well arranged and picturesque. There are ten available rooms in the house in addition to the bathroom, pantry and closets. As you enter the house you pass through a vestibule into the large reception hall, which is separated from the parlor by a sliding door, and from which there is an ornamental staircase leading to the second floor. There is an open fireplace with a handsome mantel in this room. From this room you go to the dining-room through an arch and passage, from which is an alcove containing an open lavatory. It is the kitchen and dining-room and their connections which require serious consideration when the wants of the housekeeper are properly considered. There is no great trouble in planning the front part of the house, but when it comes to the kitchen and the dining-room, and the bath connections, and all that goes with them, there is required much thought if one is serious in this kind of work.

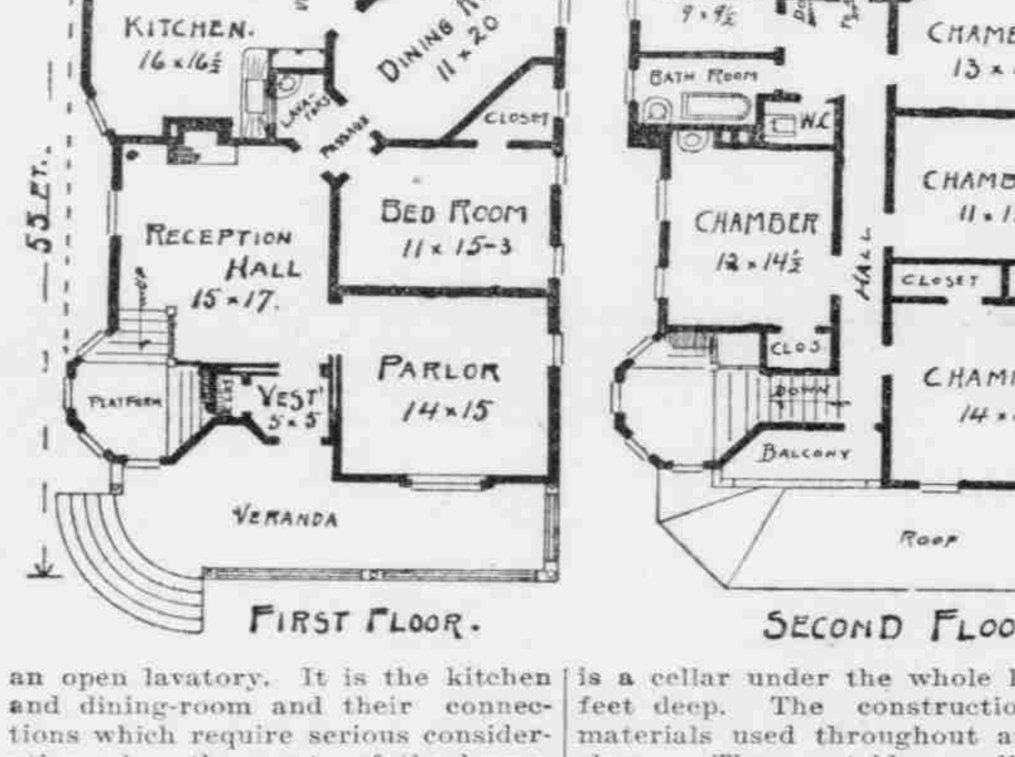
A bathroom is a great saver of labor. If we only consider that the water closet may be used as a slop sink into which to pour the wash water when it comes from the other rooms we may know how much it represents in that way. The bathroom saves all such labor as carrying the slops downstairs and bringing the water upstairs, in addition to performing its other service.

A furnace saves a great deal of work. The carrying in of coal and the carrying out of ashes from stoves or grates on the first and second floors is a very serious matter, not only because of the actual labor required in so doing, but because of the wear and tear of the furniture, carpets and other household fittings. The furnace communicates heat to all rooms and needs care no oftener than any single stove.

This house is heated by a furnace. The general dimensions are 35x55 feet, over all. Height of the first story ceiling is 10 feet, and of the second story 8 feet 6 inches. There is a cellar under the whole house 7 feet deep. The construction and materials used throughout are first class. The outside walls are sheathed, papered and covered with lap siding. The interior of the first story is finished in natural color hard woods, and the second story in natural color pine. The house could be erected complete on stone foundation for $2,500, not including the furnace or plumbing, which would probably cost about $400 additional.

E. A. PAYNE.

ATTRACTIVE TWENTY-FIVE HUNDRED DOLLAR HOME.



FIRST FLOOR. SECOND FLOOR.

REPULSIVE FORCE OF LIGHT.

The True Nature Is Something Upon Which the Scientists Are Not Perfectly Clear.

The tails of comets have long defied satisfactory explanation. It is evident that some repulsive force is active, overcoming gravitation and driving luminous matter swiftly from the sun; but as to the nature of the force it was possible only to speculate. While the corpuscular theory of light prevailed, the repulsive force was supposed to be due to the direct impact of the luminiferous particles, but when the undulatory theory prevailed this explanation lost its plausibility, and was replaced by a general, rather vague impression that the force must be in some way electrical, says a scientific authority.

More than 25 years ago, however, Clerk-Maxwell showed that as a necessary consequence of his electro-magnetic theory of light a body exposed to radiation must be repelled, and he gave a formula by which the repulsion might be calculated. According to it the earth must experience a solar repulsion of many tons, but so small compared with the sun's tremendous gravitational attraction that its effect is absolutely insensible. Upon a smaller body, however, the disproportion is much diminished; and upon a mere particle of, say, a hundred-thousandth of an inch in diameter, the repulsion should greatly exceed the attraction, and the particle must be propelled by the light with a continually increasing speed.

The recent discoveries by Herz of electric waves (the same which render wireless telegraphy possible) have practically established the truth of Maxwell's theory; and within the past year two independent verifications of his results have been obtained by Prof. Lebedew at Moscow, and by Profs. E. F. Nichols and Hull at Dartmouth college, who have succeeded in actually measuring the repulsive force of beams of light. This is an extremely important step toward the explanation of a large number of interesting and perplexing astronomical phenomena.

LOATHE SIGHT OF GOLD.

That Is the Effect of Constant Contact with the Metal Upon Mint Employes.

"I have visited the mints of three countries," remarked a traveler, a medical man, according to the Chicago Tribune, "and I have found all the official guides in them broken down in nerve and victims of insomnia. Every one of these officials is required to give bonds, not only for his own honesty, but to cover theft by visitors whom he conducts over the place. It is customary to hand money about among the visitors to show the coins in their different stages of development. If the party be a numerous one the nerves of the guide are strung to such a pitch that at the Hotel de la Monnaie, in Paris, the man confessed that the sight of coined gold and silver was odious to him, and that he had come to look upon everyone who visited the mine as a possible robber.

"Besides the effect upon the nerves, in nearly every case it has affected the eyesight. One of the guides told me that 32 years of continual gazing upon gold and silver had affected his sight so that he is unable to distinguish certain objects unless they possess peculiar iridescent qualities."

Tree That Turns to Stone.

There is a tree that grows in Mexico called the "chijol," or stone tree. It is of enormous proportions, both in circumference and height. It has a number of branches spreading out widely and carrying leaves of a yellowish green color. The wood is extremely fine and easily worked in a green state. It is not given to either warping or splitting. The most remarkable thing about it is that after being cut the wood gets gradually harder, and in the course of a few years it is absolutely petrified, whether left in the open air or buried in the ground. From this timber houses can be built completely fire-proof, and would last as long as though built of stone.

Nearly every house and hut in Siam has a clock, and most of them are of American manufacture.

A LITTLE NONSENSE.

In the way—"What's the matter with Walker?" "Run down." "Overwork?" "No, under automobile."—Philadelphia Press.

Uncomfortably Warm There.—"She shines in society, they say." "Yes, and she blazes at home, I'm informed." —Chicago Post.

His Ruling Passion.—"They had to wait two hours for the bridegroom last night." "Where was he?" "Playing ping-pong at the best man's."—Cleveland Plain Dealer.

Envy.—Scene — Miss Semple and Dawber standing near his picture. Miss Semple—"Why, there's a crowd in front of Madder's picture!" Dawber—"Some one fainted, I suppose!"—Punch.

Not Superstitious.—Tess — "Don't you really believe in dreams?" Jess—"No, indeed, it's superstitious to believe in dreams, and, besides, it's a bad sign when you believe in them, for it usually brings you bad luck."—Philadelphia Press.

Exclusiveness to be maintained: Ping—"Are Mrs. De Style's entertainments very exclusive?" Pong—"Well, I should say so; she has just made application to have the conversation of her guests copyrighted."—Baltimore Herald.

"What are you looking for, Bill?" asked the head burglar of his assistant. "We've got everything worth taking." "Don't know about that," replied Bill. "I'm now looking for the several hundred dollars which the newspapers to-morrow will say we overlooked in our haste."—Chicago Daily News.

Mrs. Greene—"Miss Black and that Brown girl made themselves ridiculously prominent at the musicale last night. It was positively scandalous!" Mrs. White—"For mercy's sake, what did they do?" Mrs. Greene—"Do? they just sat there all the evening, listening to the music, and never passed a word between them."—Boston Transcript.

CITIES NEAR VOLCANOES.

Nearly Every Eruptive Mountain in the World Has a Town or Harbor at Its Base.

With the news that St. Pierre, Martinique, will be at once rebuilt, and with a new and determined energy the idea forces itself forward that many cities, especially of the West Indies, are perilously near volcanoes. There is a tendency of people to cluster around the bases of volcanoes, and even on the very ruins of craters as if to court death. There are generally physical reasons for this in the conformation of the seacoast to the base of the extinct volcano and the existence of good harbors there. In the Lesser Antilles this fact is always true. Several of the harbors are without doubt the craters of mountains that erupted centuries ago, says the Louisville Courier-Journal.

At the northernmost end of the chain, the island of Saba, in latitude 18 degrees north, there is a settlement in the very heart of an extinct crater a thousand feet above the sea, the Dutch town of Bottom. On St. Eustatius, the next island south in the chain, the town of Orange stands right at the base of the most beautiful volcano in the West Indies. St. Christopher, or St. Kitts, of the Danish West Indies, is nothing more than an immense volcano with an extended base built up by the ejected matter from Mount Misery in centuries past. There are two large towns, Basse Terre and Sandy Point, the latter quite near the volcano.

The islands of Nevis and Montserrat, next south, are very small and no settlement would be safe should their mountains erupt. The French island of Guadeloupe contains a great "soufriere," or sulphur mountain. This has threatened for some years and may erupt at any time upon the town of Basse Terre at its very base.

At St. Lucia is Castries, a British port, well fortified, and as far as the island allows from the smoking "soufriere." Kingston, on the island of St. Vincent, is ten miles from the island volcano, which has been in such active operation lately and destroyed all the adjacent plantations and thousands of lives and scattered its ashes over Barbados, 100 miles away.

The island of Grenada, 70 miles south of St. Vincent, has its principal town built upon the brim of a volcanic crater invaded by the sea. There is another crater on the island, and should it explode nothing could be saved.

It is a fact that nearly every volcano of the world has a town or a harbor at its base, not only in the Lesser Antilles, but in South America, Mexico, Italy, Japan and in our own country. So St. Pierre's disaster might be repeated numerous times should the vast forces in the earth's interior find a vent in or near the old or still active volcanic craters.

Official Study of Lightning.

Twenty years ago a lightning rod conference, representing several of the leading scientific societies of Great Britain, made an elaborate report recommending a system of protection of buildings against thunderstorms. Experience has since shown that further study of the effects of lightning and of the means of guarding against them, is needed, and a new lightning research committee is now at work in England, with the assistance of many observers scattered over the British islands and colonies, and of several branches of the British government, while the United States department of agriculture has promised to furnish data gathered in this country. Photography offers an important aid in these new researches.—Youth's Companion.

Uncertain.

"After all," he remarked, "it is youth alone that has real courage."

"I don't know," returned the elderly spinster with acerbity, "whether it should be called courage or foolhardiness, but it is unquestionably true that the girls who marry at all usually marry quite young." — Chicago Post.

Going for Good.

Crabbe—To-day for the first time I was really delighted to hear Miss Nexdore's piano going.

Ascum—Something worth listening to, eh?

"I should say. I heard the installment men taking it away." — Philadelphia Press.

SUBSTITUTE WAGON BOX.

Adapted for Hauling Manure, Earth and Other Materials Injurious to Regular Boxes.

For hauling manure, earth, stone, etc., a good farmer does not like to use the regular box of his farm wagon, since it will not present so good an appearance on the road or last so long when used for all kinds of work as it will when better care is taken of it.

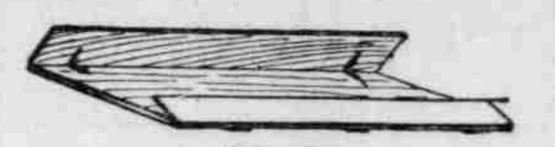


Fig. 1

It is a good plan to have an extra box to be used for the rough work.

If the farmer does not care to go to the trouble of having made an extra box, he may for some kinds of rough and dirty work, such as stone and manure hauling, replace the box with rough boards laid loosely between the standards in the old way. This method has some disadvantages, however, as the bottom boards are apt to work out of place and the side boards to fall down at the least provocation. It is best to go to a little more trouble and arrange the boards as illustrated in Fig. 1. Use the required number of boards, planed on edges, to suit space between standards and nail or screw to two or three crosspieces to hold them in place. Hinge the boards at side so as to stand up supported by the standards when on the wagon and fold up when not in use. Or the hinges may be put on on the outside, having back of hinges next to the boards. The sideboards will then turn out instead

Fig. 2

of in when folded and will just turn in far enough to stand erect when on the wagon bed. The contrivance will occupy but little room when out of use and may be set up against a corner of the wagon shed. Another way to overcome the main disadvantages of loose boards on the bed is to have each sideboard and the bottom board immediately under it nailed and strapped together as in Fig. 2. A couple of cleats nailed on the bottom will keep them in place when put on bed, and the required number of loose boards laid between in the usual manner will make the wagon ready for service. In making either of the arrangements illustrated, the farmer is expected not to go to any great pains of workmanship.—J. G. Allshouse, in Ohio Farmer.

THE CURING OF HAY.

Some Reasons Why the Best Quality Has Necessarily to Be Made in the Shade.

Every year there are many questions about curing hay. Early-cut grass contains more moisture than that which stands until dead ripe, and is harder to cure. Hay is grass with the water taken out of it. The water is removed by the wind—a hot breeze while the sun is shining giving ideal haymaking conditions. The easiest way for the water to be taken from the plant is through the leaves. When these leaves are dried and killed first of all there will be considerable water left in the stem, and this will move out very slowly. When the leaves are left fresh, they suck on pump the water rapidly from the stem, and thus dry it quickly. Cut down two trees in full leaf. From one take every green leaf at once and let the leaves on the other slowly wither and die. You will find the first tree wet and soggy, while the other is dry—having been sucked or pumped by the leaves. These things explain why the best hay is made in the shade. The leaves are not withered, but keep on pumping water from the stems and "sweating" it out. Clover especially is best cured in the cock. Its thin, broad leaves are quickly wilted in the hot sun, while in the pile they keep at work. We must remember that some samples of early-cut clover contain over 1,600 pounds of water in every ton and that 1,500 pounds of the water must be taken out in a short time! One reason why the tedder makes such a useful hay tool is that it breaks the stem and gives the water a chance to escape.—Rural New Yorker.

Standards in Cheese Curing.

Every year new standards are being raised in the curing of cheese. Every year also the degree of temperature at which cheese may be cured is lowered by the experts. It was not long ago that the proper temperature for the curing of cheese was thought to be somewhere between 60 and 70 degrees. In Canada they have been curing cheese at 40 degrees and doing it successfully. The cheese so cured were put into this temperature direct from the hoop. The place in which they were kept was a cold storage house. After four months these cheese were scored and found to be in every way equal to the cheese stored in a curing room held at 65 degrees.

Fighting for Cleanliness.

It is a little strange to hear of a milk producer and a milk handler being arrested for dirty methods in connection with the same. Yet that is what is reported from Minnesota. One of the patrons of a creamery put his milk into dirty cans and took it to a creamery. At the creamery the milk was run through dirty pipes into the milk tank. The state inspector had both the farmer and the buttermaker arrested and fined $25 each, which fines were promptly paid. This looks as if the Minnesota butter inspectors intend to have a general cleaning up.—Farmers' Review.

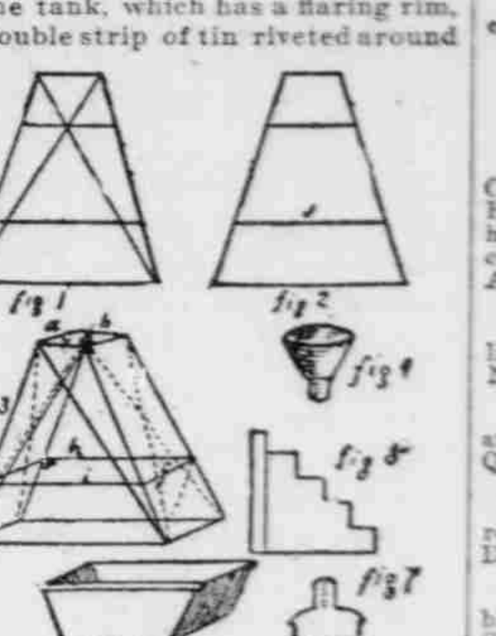
The daily loss from evaporation on unstirred soil is much more than on properly cultivated soil.

A HANDY MILK COOLER.

Very Simple in Construction and Almost Essential to Successful Dairy Operations.

It is essential that milkmen cool their milk before it leaves the farm, and if it be air-cooled it will keep longer and win a better name. A cooler of home manufacture, Fig. 3, is a wooden frame, 6 or 7 feet in height. The separate sides, Fig. 2, may be made of four strips, with as many crosspieces as necessary for stability, as shown in Fig. 1. A slight uneveneness of structure will not affect its usefulness if it but stand firm. The funnel, Fig. 4, over which a cheesecloth strainer of many thicknesses is hung, rests in the aperture at the top, as shown at a b c d, in Fig. 3. Cleats of wood are nailed on three inner sides, g h i j, of the frame, to hold the tank, which clears the floor several inches, or even a foot, according to height of frame. Thus the milk is given a fall of two or three feet.

The fourth side (f) is left open to admit the tank, which has a flaring rim, or a double strip of tin riveted around



AERATOR AND STRAINER.

its upper edge to catch on the cleats. The milk may be drawn off by means of a faucet, or it may be dipped from the tank, Fig. 6, into the cans. Movable steps, Fig. 5, are needed for an extra high frame, and any small boy can pour the milk into the strainer covered funnel and dip it into cans when milking is over.

Stand it out of reach of flying chaff and odors. Set the milk in a spring, rather than on ice, the night's milk all night, the morning's an hour or more, as convenient. A spring, sheltered from the sun by a rude board house, or only shade trees, is better than any icehouse. Sink a tub or box into the spring or running stream, or scoop it wider and wall around with stone, not too deep for the cans to rest firmly on the foundation stone. Where a spring is not available, ice water is a substitute. Ice, carried in the milk cart, wedged between the cans, helps ward off complaints of sour milk. Tin covers or "stoppers," Fig. 7, with chimneys having perforated sides, are indispensable. Rince both can and cover with lime water, strained, after washing.—L. L. Trott, in Farm and Home.

BREAKING THE HEIFER.

Many Dairymen Dread This Operation, and in Most Cases Without Reasonable Cause.

We have broken several Jerseys and have cows that apparently never knew how to kick, writes G. C. Iles, in the Ohio Farmer.

In the first place, the heifer should be perfectly tame; should never have known fear of her owner; should be accustomed to going into the stable. We prefer the winter time, as she is accustomed to being in the stable then. However, she should be tame enough to go into it at any time without fear and anxiety regarding the safety of the calf when we are around, while if we came around her for the first time after the calf is several hours old she seems to think we want to injure the calf, and she is frightened; and there are other reasons for being with her at the time.

We never touch a heifer's udder before she is fresh. In nearly every case she will resent it with a kick, and once started to kicking she may keep at it. We often read advice to accustom the heifer to having her udder handled before being fresh. We wonder if the author of such advice practices it. It is contrary to nature for a heifer to allow her udder to be meddled with until the time comes for her to be milked. The first time we touch her udder is when the calf sucks the first time. It is natural for her to want to be milked then. In a few hours we separate the calf and heifer and when we wish to milk her we turn her with the calf and let the calf suck while we milk. We milk her in this way a few times, when we separate them for good, and we seldom have any trouble afterward.

We are always very careful not to hurt her in milking. There is a great difference in the way different people milk. Some squeeze the teats so roughly and pull downward so hard that the cow kicks because she is hurt. Avoid hurting your cow and she will not kick you. No heifer should be allowed to be fresh without having been fed and prepared for the occasion. This is especially so if she is on dry feed. Linseed oil meal fed with other grain feed and clover hay will make her in good condition for calving.

Feeding the Dairy Calf.

If the calf is to be a dairy cow, a mixture of bran, or whole or ground oats, should be given as soon as it shows a disposition to take it. Sometimes it is well to put a little in its mouth to give it a taste of the meal. Give only as much as it will take, for it may get a dislike to it if left over in the box. A little early cut, good flavored hay should be given as soon as it will take it. But here again comes in the importance of observation as to the amount needed. A few spears at first is better than a bundle. Give a calf no more than it will eat, and by so doing it will be taught to be a good and economical feeder. If it gets more than it wants it will acquire the habit of nosing over its feed and wasting more than it eats.—Midland Farmer.

Horticulture is the art of making plants grow to their best development by means of removing as far as possible all opposing forces.

MODERN CATECHISM.

In Which We Find Enlightenment Regarding the Purpose of the Whizz-Wagon.

"What was that just whizzed past us?" asked one pedestrian of another, according to the Ohio State Journal.

"That was an automobile."

"And what is an automobile?"

"It is something which has been invented to increase the mortality rate."

"Has it been successful in doing this?"

"Yes, indeed; it has surpassed the fondest expectations."

"What would have happened if we had not got out of the way of the automobile?"

"Two funerals."

"Who is the man who is running the automobile?"

"He is called a chauffeur."

"Is that the only name he has?"

"No; people often call him many other names."

"What would he do if he were to run over some one?"

"He would smile."

"Would he stop?"

"I should say not."

"What would the police do?"

"They would arrest him."

"What then?"

"He would be fined and discharged."

"That would reform him, would it not?"

"No; he doesn't mind being fined, because he has lots of money."

"How fast is that automobile going?"

"About 30 miles an hour."

"Is not that very fast?"

"Not for an automobile."

"Why didn't you tell Toughboy that he lied?" "My telephone is out of order."—Norristown Herald.

The great secret of success in life is to be ready when your opportunity comes.—Disraeli.

Luck is often but another name for hard horse sense.—Milwaukee Sentinel.

Circulate as much truth and as few words as possible.—Chicago Daily News.

A trifling argument may end in a record-smashing quarrel.—Milwaukee Sentinel.

Truth is violated by falsehood, and it may be equally outraged by silence.—Ammien.

The sunshine of life is made up of very little beams that are bright all the time.—Arkin.

"Loafing and arguing," commented the large-waisted philosopher, "are equally profitable; and usually the man who does most of one also does most of the other."—Indianapolis News.

Sorry She Spoke.—"Thank you, my little man," said Miss Passay to the nice little boy who had given up his seat in the car, "and you have been taught to always give your seat to ladies?" "No'm," replied the bright boy, "only to old ladies."—Philadelphia Press.

How It Occurred.—Aunt Hannah—"I saw that young man kiss you, Jane; how did it come about?" Jane—"In the most natural way in the world, auntie. He asked me if I would be offended if he kissed me, and I told him it was impossible for me to say until I knew what it was like."—Boston Transcript.

Impertinence.—Mistress (to new servant)—There are two things, Mary, about which I am very particular; they are truthfulness and obedience." Mary—"Yes'm; and when you tell me to say you're not in, when a person calls that you don't wish to see, which is it to be, mum—truthfulness or obedience?"—King.

Keeping Up with Fate.

"You will be married within a year," continued the fortune teller. "Dear me!" exclaimed the lady, who was already married. "I shall have to begin divorce proceedings at once."—Boston Post.